

1     Claims

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3     1. A composition containing at least one nucleic acid  
4         sequence and/or at least one amino acid sequence, or  
5         a synthetically prepared analogue thereof or a  
6         substantially homologous sequence, wherein the  
7         composition is derived from or based upon the  
8         sequence of infectious salmon anaemia virus and  
9         wherein the at least one of said nucleotide and/or  
10        amino acid sequences does not cause salmon anaemia  
11        and is capable of being used as or to prepare a  
12        vaccine to ISAV.

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14     2. The composition of claim 1, wherein the  
15         substantially homologous amino acid sequence encodes  
16         a peptide which is at least 70% homologous to a  
17         surface antigen and is capable of inducing an immune  
18         response.

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20     3. The composition of claim 1, wherein the composition  
21         comprises at least one amino acid sequence chosen  
22         from the group consisting of Sequences ID numbers 2,  
23         4, 6, 7, 8 or 10.

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25     4. A composition as claimed in claims 1 to 3 wherein  
26         the at least one amino acid sequence comprises at  
27         least one fragment of a sequence belonging to the  
28         group consisting of Sequence ID no's 2, 4, 6, 7, 8  
29         or 10.

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31     5. A composition as claimed in claims 1 to 3 wherein  
32         the at least one amino acid sequence is a truncated  
33         form of at least one of the amino acid sequences of

- 1       the group consisting of Sequence ID Numbers 2, 4, 6,  
2       7, 8 or 10, which is capable of inducing an immune  
3       response.  
4
- 5       6. Preferably the substantially homologous nucleotide  
6       sequence is at least 60% homologous to a sequence of  
7       a part of a surface antigen and the part of the  
8       antigen is capable of inducing an immune response.  
9
- 10      7. A composition as claimed in claim 1 wherein the  
11      nucleotide sequence is chosen from the group  
12      consisting of Sequence ID numbers 1, 3, 5 and 9.  
13
- 14      8. A composition as claimed in claim 1 or claim 7  
15      wherein the or at least one nucleotide sequence  
16      contains at least one fragment of a sequence chosen  
17      from the group consisting of Sequence ID numbers 1,  
18      3, 5 and 9.  
19
- 20      9. A composition as claimed in claim 1, claim 7 or  
21      claim 8 wherein the at least one sequence is a  
22      truncated form of the sequence chosen from the  
23      group consisting of Sequence ID Numbers 1, 3, 5 and  
24      9.  
25
- 26      10. A composition as claimed in any of claims 1, 7, 8  
27      or 9, wherein the nucleotide sequence is  
28      incorporated in a plasmid.  
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- 30      11. A composition as claimed in any of the previous  
31      claims wherein the nucleotide sequence is  
32      incorporated in an expression vector.  
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- 1     12. The use of any of Sequence ID numbers 1 to 10, as  
2       described in the present invention in the  
3       preparation of a vaccine and/or therapeutic  
4       medicament for the protection of fish from  
5       infection with Infectious Salmon Anaemia virus.  
6
- 7     13. A vaccine to protect fish against ISAV wherein the  
8       vaccine is based upon or derived from nucleic acid  
9       or peptide sequences as set out in any of Sequence  
10      ID numbers 1 to 10.  
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